

Appln No. 09/452,043

Amdt date August 2, 2004

Reply to Office action of May 20, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A network telephone comprising:
a microphone coupled to a network to provide voice data to the network, wherein the network includes voice data and non-voice data;
a speaker configured to facilitate listening to voice data from the network;
a dialing device coupled to the network to facilitate routing of voice data upon the network;
a first port configured to facilitate communication with a first network device;
a second port configured to facilitate communication with a second network device; ~~and~~
a prioritization circuit coupled to the network to apply a first processing priority level to voice data provided by the microphone and a second processing priority level to non-voice data in the network; and
a buffer for storing the voice data arriving from the network, wherein if an earlier transmitted voice data arrives after a later transmitted voice data has already been read from the buffer, the earlier transmitted voice data is deleted.

2. (Original) The network telephone as recited in claim 1, wherein the first port is configured to facilitate

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communication of voice data packets with the first network device and the second port is configured to facilitate communication of voice data packets with the second network device.

3. (Original) The network telephone as recited in claim 1, wherein the microphone and the speaker at least partially define a handset.

4. (Original) The network telephone as recited in claim 1, wherein the dialing device comprises a keypad.

5. (Original) The network telephone as recited in claim 1, wherein the first port and the second port comprise Ethernet 10/100 ports.

6. (Original) The network telephone as recited in claim 1, wherein the prioritization circuit is defined by a network switch.

7. (Original) The network telephone as recited in claim 1, wherein the prioritization circuit is defined by an Ethernet switch.

8. (Original) The network telephone as recited in claim 1, wherein:

the prioritization circuit is defined by a network switch; and

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further comprising a voice engine processor in communication with the network switch, the voice engine processor being configured to digitize and compress voice data from the microphone and to decompress and perform digital to analog conversion upon voice data provided to the speaker.

9. (Original) The network telephone as recited in claim 1, wherein:

the prioritization circuit is defined by a network switch; and

further comprising a voice engine processor in communication with the network switch, the voice engine processor being configured to digitize, compress and packetize voice data from the microphone and to depacketize, decompress and perform digital to analog conversion upon voice data provided to the speaker.

10. (Original) The network telephone as recited in claim 1, wherein the prioritization circuit is configured to tag voice data packets to facilitate prioritization thereof.

11. (Original) The network telephone as recited in claim 1, wherein the prioritization circuit is configured to tag voice data packets to facilitate prioritization thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof.

12. (Currently Amended) A network telephone comprising:

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a switch controller having at least one port for facilitating electrical communication with a network, wherein the network includes voice data and non-voice data, and wherein the switch controller is configured to assign a first processing priority level to voice data and a second processing priority level to non-voice data; ~~and~~

a voice engine processor in electrical communication with the switch controller, the voice processor having a microphone port for facilitating electrical communication with a microphone and having a speaker port for facilitating electrical communication with a speaker; and

a buffer for storing the voice data arriving from the network, wherein if an earlier transmitted voice data arrives after a later transmitted voice data has already been read from the buffer, the earlier transmitted voice data is deleted.

13. (Previously Presented) The telephone as recited in claim 12, wherein the switch controller applies a high processing priority level to voice packets.

14. (Previously Presented) The telephone as recited in claim 12, wherein the switch controller is configured to route voice data packets over a network.

15. (Previously Presented) The telephone as recited in claim 12, wherein the switch controller is configured to route voice data packets over an Ethernet.

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16. (Previously Presented) The telephone as recited in claim 12, wherein the switch controller is configured to route voice data packets over the Internet.

17. (Previously Presented) The telephone as recited in claim 12, wherein the switch controller is configured to apply a first processing priority level to voice data packets provided by the microphone and coupled to the network to route the voice data packets over the network.

18. (Previously Presented) The network telephone as recited in claim 12, wherein the switch controller is configured to tag voice data packets to facilitate assigning a first processing priority thereto.

19. (Previously Presented) The network telephone as recited in claim 12, wherein the switch controller is configured to tag voice data packets to facilitate assigning a first processing priority thereto and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof.

20. (Original) The telephone as recited in claim 12, wherein the switch controller is configured to be compatible with Internet Protocol.

21. (Original) The telephone as recited in claim 12, wherein electrical communication between the switch controller

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and the voice engine processor is facilitated via a media independent interface and a microprocessor interface.

22. (Original) The telephone as recited in claim 12, wherein the switch controller comprises two ports for facilitating communication with the network.

23. (Original) The telephone as recited in claim 12, wherein the switch controller comprises two Ethernet ports for facilitating communication with the network.

24. (Original) The telephone as recited in claim 12, wherein the switch controller comprises two 10/100 megabit/sec Ethernet ports for facilitating communication with the network.

25. (Original) The telephone as recited in claim 12, wherein the voice engine processor further comprises a keypad port for facilitating communication with a keypad.

26. (Original) The telephone as recited in claim 12, wherein the voice engine processor further comprises a display port for facilitating communication with a display.

27. (Original) The telephone as recited in claim 12, wherein the switch controller is configure to be placed serially into a Ethernet transmission medium intermediate a network interface card and a switch.

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28. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to compress voice communications.

29. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to compress voice communications using PCM compression.

30. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to suppress silence.

31. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to provide a desired level of quality of service.

32. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to provide signaling for voice traffic.

33. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to provide signaling for PBX voice traffic.

34. (Original) The telephone as recited in claim 12, wherein the voice engine processor is configured to provide echo control.

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35. (Currently Amended) A network telephone comprising a prioritization circuit coupled to a network including voice data packets and non-voice data packets to tag voice data packets with information representative of a priority thereof to ensure that the voice data packets are given a higher processing priority than non-voice packets and configured to read tags associated with packets; and a buffer for storing the voice data packets arriving from the network, wherein if an earlier transmitted voice data packet arrives after a later transmitted voice data packet has already been read from the buffer, the earlier transmitted voice data packet is deleted.

36. - 67. (Cancelled)

68. (Currently Amended) A network telephone system comprising:

a network including voice data packets and non-voice data packets; ~~and~~

at least one network telephone, each network telephone comprising a network switch coupled to the network to assign a first priority level to voice data packets and a second priority level to non-voice data packets and wherein the network switch is further configured to read prioritization of voice data packets; and

a buffer for storing the voice data packets arriving from the network, wherein if an earlier transmitted voice data packet arrives after a later transmitted voice data packet has already been read from the buffer, the earlier transmitted voice data packet is deleted.

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69. (Currently Amended) A method for communicating voice via a network, the method comprising:

facilitating routing of voice data upon the network via a dialing device;

providing voice data to the network via a microphone, wherein the network includes voice data and non-voice data;

listening to voice data from the network via a speaker;

facilitating communication with a first network device via a first port;

facilitating communication with a second network device via a second port; and

prioritizing voice data provided by the microphone over non-voice data;

storing the voice data arriving from the network in a buffer; and

deleting an earlier transmitted voice data if the earlier transmitted voice data arrives after a later transmitted voice data has already been read for listening from the buffer.

70. (Original) The method as recited in claim 69, wherein the first port is configured to facilitate communication of voice packets with the first network device and the second port is configured to facilitate communication of voice packets with the second network device.

71. (Original) The method as recited in claim 69, wherein the microphone and the speaker comprise a handset.

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72. (Original) The method as recited in claim 69, wherein the dialing device comprises a keypad.

73. (Original) The method as recited in claim 69, wherein the first port and the second port comprise Ethernet 10/100 ports.

74. (Original) The method as recited in claim 69, wherein the prioritization circuit is defined by a network switch.

75. (Original) The method as recited in claim 69, wherein the prioritization circuit is defined by an Ethernet switch.

76. (Original) The method as recited in claim 69, wherein:

the prioritization circuit is defined by a network switch; and

further comprising a voice engine processor in communication with the network switch, the voice engine processor being configured to digitize and compress voice data from the microphone and to decompress and perform digital to analog conversion upon voice data provided to the speaker.

77. (Original) The method as recited in claim 69, wherein:

the prioritization circuit is defined by a network switch; and

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further comprising a voice engine processor in communication with the network switch, the voice engine processor being configured to digitize, compress voice and packetize data from the microphone and to depacketize, decompress and perform digital to analog conversion upon voice data provided to the speaker.

78. (Original) The method as recited in claim 69, wherein the prioritization circuit is configured to tag voice packet to facilitate prioritization thereof.

79. (Original) The method as recited in claim 69, wherein the prioritization circuit is configured to tag voice packet to facilitate prioritization thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof.

80. (Currently Amended) A method comprising:

using a switch controller having at least one port to facilitate electrical communication with a network, wherein the network includes voice packets and non-voice packets and, wherein the switch controller is configured to prioritize processing of voice packets over non-voice packets; and

using a voice engine processor in electrical communication with the switch controller to process voice, the voice processor having a microphone port for facilitating electrical communication with a microphone and having a speaker port for facilitating electrical communication with a speaker;

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storing the voice data packets arriving from the network in a buffer; and

deleting an earlier transmitted voice data packet if the earlier transmitted voice data packet arrives after a later transmitted voice data packet has already been read for listening from the buffer.

81. (Original) The method as recited in claim 80, wherein the switch controller is configured to apply prioritization to voice packets.

82. (Original) The method as recited in claim 80, wherein the switch controller is configured to apply prioritization to voice packets and to route voice packets over a network.

83. (Original) The method as recited in claim 80, wherein the switch controller is configured to apply prioritization to voice packets and to route voice packets over an Ethernet.

84. (Original) The method as recited in claim 80, wherein the switch controller is configured to apply prioritization to voice packets and to route voice packets over the Internet.

85. (Previously Presented) The method as recited in claim 80, wherein the switch controller is configured to apply

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prioritization to voice packets provided by the microphone and configured to route the vice packets over a network.

86. (Original) The method as recited in claim 80, wherein the switch controller is configured to tag voice packet to facilitate prioritization thereof.

87. (Original) The method as recited in claim 80, wherein the switch controller is configured to tag voice packet to facilitate prioritization thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof.

88. (Original) The method as recited in claim 80, wherein the switch controller is configured to be compatible with Internet Protocol.

89. (Original) The method as recited in claim 80, wherein electrical communication between the switch controller and the voice engine processor is facilitated via a media independent interface and a microprocessor interface.

90. (Original) The method as recited in claim 80, wherein the switch controller comprises two ports for facilitating communication with the network.

91. (Original) The method as recited in claim 80, wherein the switch controller comprises two Ethernet ports for facilitating communication with the network.

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92. (Original) The method as recited in claim 80, wherein the switch controller comprises two 10/100 megabit/sec Ethernet ports for facilitating communication with the network.

93. (Original) The method as recited in claim 80, wherein the voice engine processor further comprises a keypad port for facilitating communication with a keypad.

94. (Original) The method as recited in claim 80, wherein the voice engine processor further comprises a display port for facilitating communication with a display.

95. (Original) The method as recited in claim 80, wherein the switch controller is configure to be place serially into a Ethernet transmission medium intermediate a network interface card and a switch.

96. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to compress voice communications.

97. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to compress voice communications using PCM compression.

98. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to suppress silence.

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99. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to provide a desired level of quality of service.

100. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to provide signaling for voice traffic.

101. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to provide signaling for PBX voice traffic.

102. (Original) The method as recited in claim 80, wherein the voice engine processor is configured to provide echo control.

103. (Currently Amended) A method for communicating voice via a network including voice packets and non-voice packets, the method comprising:

tagging voice packets with information representative of a priority thereof to ensure the tagged voice packets are given a higher processing priority than non-voice packets and reading tags associated with packets;

storing the voice data packets arriving from the network in a buffer; and

deleting an earlier transmitted voice data packet if the earlier transmitted voice data packet arrives after a later transmitted voice data packet has already been read for listening from the buffer.

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104. - 135. (Cancelled)

136. (Currently Amended) A method for communicating voice comprising:

providing a network including voice packets and non-voice packets; ~~and~~

applying a higher prioritization to voice packets than non-voice packets to ensure that the voice packets are given a higher processing priority than the non-voice packets and reading prioritization of voice packets via at least one network telephone, each network telephone comprising a network switch;

storing the voice data packets arriving from the network in a buffer; and

deleting an earlier transmitted voice data packet if the earlier transmitted voice data packet arrives after a later transmitted voice data packet has already been read for listening from the buffer.